ABSTRACT OF THE DISCLOSURE

An axial flow pump comprising a inner wall disposed in contact with the inside of a stator having winding, a rotor disposed inside the inner wall and adapted to be rotated upon energization of the winding, an axial flow blade formed on an outer periphery of the rotor spirally in a rotational axis direction of the rotor, and a flow path formed between the rotor and the inner wall and defined spirally in the rotational axis direction of the rotor by the axial flow blade. The inner wall is formed of non-magnetic metal and heat generated from the winding upon energization of the winding is transmitted through the inner wall to fluid flowing through the flow path, thereby enhancing the utilization rate of heat generated in the axial flow pump.